

**Amendments to the Drawings:**

No amendments are made to the Drawings herein.

### **REMARKS**

By the foregoing Amendment, Claims 1, 13, 14 and 15 are amended. Entry of the Amendment, and favorable consideration thereof is earnestly requested.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. More specifically, the Examiner has expressed concern regarding the concepts of a "floor" for the recess and the house and the "peripheral wall" for the recess and the house. The Examiner has expressed similar concerns in the "Response to Arguments" section of the outstanding Office Action. Claims 1, 13, 14 and 15 have been amended to completely remove these terms. The Claims now refer to a "bottom" in the recess and in the house, the "bottom" of each having a plurality of openings therein. Support for these elements can be found in many places throughout the Specification, including Paragraphs [0015], [0017] and [0023] and the accompanying Figures.

The Examiner has rejected all pending claims either under 35 U.S.C. §102(b) as being anticipated by, or under 35 U.S.C. §103(a) as being unpatentable over, Smith et al. (U.S. Patent No. 4,635,761). Applicant respectfully asks the examiner to reconsider these rejections in view of the above Amendments and the below Remarks.

The present invention is directed to a modular disc brake, preferably for a heavy road vehicle. The modular disc brake includes a frame, a house and a cover. A brake mechanism forming a single pre-mounted unit is received in the house. The modules are held together by means of pull rods and nuts. The house is received in a recess of the frame. The cover covers the end of the house. As disclosed, the modular elements of the caliper (i.e., the frame, house and cover) are preferably designed so as to allow for ready access to the brake mechanism

and such that machining of the caliper is less cumbersome than in known designs in that no deep recesses need to be machined. All claims have been amended to require a very specific configuration which allows these objectives to be achieved.

More specifically, all claims have been amended to require, among other elements, (i) that the frame include a recess having a bottom, the bottom of the recess having a plurality of openings therein adapted to allow a plurality of thrust units to pass therethrough, (ii) that the house comprises a bottom, the bottom having a plurality of through openings therein adapted to allow the plurality of thrust units to pass therethrough, and (iii) that the house be disposed within the recess such that the plurality of through openings in the bottom of the house are aligned with the plurality of openings in the bottom of the recess such that the plurality of thrust units pass through the bottom of the house and the bottom of the recess. Applicant respectfully submits that Smith et al. does not disclose, teach or suggest at least these limitations.

The very specific configuration of the modular disc brake required by all claims, as amended, provides a brake which is simple in design as well as simple to assemble. The service brake mechanism is disposed within a "cup-shaped" house (i.e., one having a bottom, as claimed). The "cup-shaped" house is disposed within a recess. Corresponding and aligned openings are provided through the bottoms of the house and the recess to allow a plurality of thrust units of the service brake mechanism to pass therethrough. A cover closes the open end of the "cup-shaped" house. This design provides numerous advantages over all known prior art designs, including Smith et al.

Smith et al. does not disclose, teach or suggest a house having a bottom with a plurality of through openings therein. Even reading Smith et al. as

suggested by the Examiner (and with reference to the drawing contained in the outstanding Office Action), the “bottom” of the house simple comprises the end of the side wall of element 30. It cannot be said that the “bottom” of the house has a plurality of through openings therein, as is required by all claims. Moreover, Smith et al. does not disclose, teach or suggest a frame having a recess comprising a bottom with a plurality of openings therein. Even reading Smith et al. as suggested by the Examiner (and with reference to the drawing contained in the outstanding Office Action), the “bottom” of the recess simple comprises shoulder formed within a hole formed in element 12. It cannot be said that the “bottom” of the recess has a plurality of openings therein, as is required by all claims.

It should be noted that the above differences between Smith et al. and the present invention are substantial, and that because of these differences, Smith et al. suffers from many of the same disadvantages as other known prior art designs. For example, the caliper of Smith et al. (and specifically the caliper housing 12 thereof) would require the machining of a deep “recess” (i.e., a hole passing all the way therethrough). Moreover, the design of Smith et al. does not allow for ready access to the brake mechanism, but rather would require complete disassembly to gain such access.

Moreover, Applicant respectfully submits that it would not have been obvious to modify Smith et al. to arrive at the present invention as claimed. It is well settled that the mere fact that references can be combined or modified does not render the resultant combination or modification obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Here, there is absolutely no motivation provided in Smith et al. for modifying the device disclosed therein in a way that would arrive at the claimed invention. Moreover, the modifications that one would

have to make to Smith et al. to arrive at the present invention would be substantial, and essentially amount to a complete redesign of the caliper housing thereof. Applicant respectfully submits that one skilled in the art would not make such modifications absent using the present application as a road-map.

For the foregoing reasons, Applicant respectfully submits that all pending claims, namely Claims 1-17, are patentable over the references of record, and earnestly solicits allowance of the same.

Respectfully submitted,



---

Wesley W. Whitmyer, Jr., Reg. No. 33,558  
Todd M. Oberdick, Reg. No. 44,268  
ST. ONGE STEWARD JOHNSTON & REENS LLC  
986 Bedford Street  
Stamford, Connecticut 06905-5619  
(203) 324-6155  
Attorneys for Applicant